ATTORNEY DOCKET NO 1457-CA (P280US)

U.S. 10/656,749

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

licant:

Trotter, et al.

Serial No.:

10/656,749

Filed:

September 5, 2003

Title:

DATA CONVERTERS WITH TERNARY PULSE WIDTH MODULATION

OUTPUT STAGES AND METHODS AND SYSTEMS USING THE SAME

Confirm No.: 9065

Art Unit:

2819

Examiner:

John B. Nguyen

Box: Amendment

Commissioner for Patents

P. O. Box 1450

Alexandria, VA 22313-1450

Sirs:

## AMENDMENT AND RESPONSE TO OFFICE ACTION

In response to the Official Action mailed March 5, 2004 (Paper No. 2), Applicants respectfully request that the Examiner reconsider the rejection of the claims in view of the following amendments thereto, and the comments set forth below.

Amendments to the Claims are reflected in the listing of claims, which begins on Page 2 of this paper.

Remarks / Arguments begin on Page 9 of this paper

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54.00 OP 602.00 DP

| TRANSMITTAL FORM  (to be used for all correspondence after initial file.)  Total Number of Pages in This Submission   | Application Number  Filling Date First Named Inventor  Art Unit  Examiner Name  Attorney Docket Number   | PTO/SB/21 (08-03) Approved for use through 08/30/2003. OMB 0651-0031 and Trademark Office; U.S. DEPARTMENT OF COMMERCE n of information unless it displays a valid OMB control number. 10/656,749 09/05/2003 Brian David Trotter 2819  John B. Nguyen 1457-CA (P280US) |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|
| Total Number of Pages in This Submission  | <i>I</i> ~)  |  |  |  |  |  |  |  |
| Fee Transmittal Form  Fee Attached  Amendment/Reply  After Final  Affidavits/declaration(s)  Extension of Time Request  Express Abandonment Request  Information Disclosure Statement  Certified Copy of Priority Document(s)  Response to Missing Parts/ Incomplete Application  Response to Missing Parts under 37 CFR 1.52 or 1.53 | Drawing(s)  Licensing-related Papers  Petition  Petition to Convert to a Provisional Application Power of Attorney, Revocation Change of Correspondence Address  Terminal Disclaimer  Request for Refund  CD, Number of CD(s)  Remarks | After Allowance communication to Technology Center (TC)  Appeal Communication to Board of Appeals and Interferences  Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)  Proprietary Information   |  |  |  |  |  |  |
|   | TURE OF APPLICANT, ATTORNE   | Y. OR AGENT  |  |  |  |  |  |  |
| Firm or Winstead Sechrest & Minic Individual name   |  |  |  |  |  |  |  |  |
| Signature must make   |  |  |  |  |  |  |  |  |
| Date 6-2-04   |  |  |  |  |  |  |  |  |
| CE  | CERTIFICATE OF TRANSMISSION/MAILING  |  |  |  |  |  |  |  |
| I hereby certify that this correspondence is be   | eing facsimile transmitted to the USPTO or d   | deposited with the United States Postal Service with ents, P.O. Box 1450, Alexandria, VA 22313-1450 on   |  |  |  |  |  |  |

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Telephone 214.745.5374

Date

6-2-04

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| •   | for FY 2004       |   |

Effective 10/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

(\$) 656.00 TOTAL AMOUNT OF PAYMENT

SUBMITTED BY

Name (Print/Type)

Signature

James J. Murphy

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| Co                             | omplete if Known  |
| Application Number             | 10/656,749  |
| Filing Date                    | September 5, 2003   |
| First Named Inventor           | Brian David Trotter   |
| Examiner Name                  | John B. Nguyen  |
| Art Unit                       | 2819  |
| Attorney Docket No.            | 1457-CA (P280US)  |

| METHOD OF PAYMENT (check all that apply)   |  | FEE CALCULATION (continued)                         |                     |              |             |  |             |
|--|--|---|---------------------|--------------|-------------|--|-------------|
| ✓ Check Credit card Money Other None   |  | 3. ADDITIONAL FEES                                  |                     |              |             |  |             |
| Order C  |  | Large I   | Entity              | Small        | Entity      |  |             |
| Deposit Account:   |  | Fee<br>Code   |                     | Fee<br>Code  | Fee<br>(\$) | Fee Description  | Fee Paid    |
| Account 23   | -2426  | 1051  | 130                 | 2051         |             | Surcharge - late filing fee or oath                            |             |
| Number Deposit Winstand Sech   | rest & Minick P.C.                                     | 1052  | 50                  | 2052         | 25          | Surcharge - late provisional filing fee or                     |             |
| Account VVIIIstead Section   | lest & William 1.0.                                    | 1053  | 130                 | 1053         | 130         | cover sheet Non-English specification                          |             |
| The Director is authorized to: (check  |  |   | 2.520               | 1812         |             | For filing a request for ex parte reexamination                |             |
| ☐ Charge fee(s) indicated below ✓ Credit any overpayments  |  | 1804  | 920*                | 1804         | 920*        | Requesting publication of SIR prior to                         |             |
| Charge any additional fee(s) or any  |  |   |                     |              |             | Examiner action  | <del></del> |
| Charge fee(s) indicated below, exc to the above-identified deposit account   |  | 1805  | 1,840*              | 1805         | 1,840*      | Requesting publication of SIR after<br>Examiner action         |             |
|  |  | 1251  | 110                 | 2251         | 55          | Extension for reply within first month                         |             |
| FEE CALCU  | LATION   | 1252  | 420                 | 2252         | 210         | Extension for reply within second month                        |             |
| 1. BASIC FILING FEE Large Entity Small Entity  |  | 1253  | 950                 | 2253         | 475         | Extension for reply within third month                         |             |
| Fee Fee Fee Fee Des  | cription Fee Paid                                      | 1254  | 1,480               | 2254         | 740         | Extension for reply within fourth month                        |             |
| Code (\$) Code (\$) 1001 770 2001 385 Utility  | filing fee   | 1255  | 2,010               | 2255         | 1,005       | Extension for reply within fifth month                         |             |
| I ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '  | n filing fee   | 1401  | 330                 | 2401         | 165         | Notice of Appeal   |             |
|  | filing fee   | 1402  | 330                 | 2402         |             | Filing a brief in support of an appeal                         |             |
| 1004 770 2004 385 Reissu   | ue filing fee  | 1403  | 290                 | 2403         |             | Request for oral hearing                                       |             |
| 1005 160 2005 80 Provis  | ional filing fee                                       | 1451  | 1,510               | 1451         |             | Petition to institute a public use proceeding                  |             |
| SUBTO  | TAL (1) (\$)   | 1452  | 110                 | 2452         | 55          | Petition to revive - unavoidable                               |             |
| 2. EXTRA CLAIM FEES FOR  |  |   | 1,330               | 2453         |             | Petition to revive - unintentional                             |             |
|  | Fee from   | Į.  | 1,330               | 2501         |             | Utility issue fee (or reissue)                                 |             |
| Total Claims $23$ $-20** = 3$  | taims below Fee Paid                                   | 1502  | 480                 | 2502         |             | Design issue fee   |             |
| Independent 10 3** - 7   | x 00 =602  | 1503  | 640                 | 2503<br>1460 |             | Plant issue fee  Petitions to the Commissioner                 |             |
| Claims 10 13 2 17 Multiple Dependent   |  | 1460  | 130<br>50           | 180          |             | Processing fee under 37 CFR 1.17(q)                            |             |
| Large Entity   Small Entity  |  | 1807<br>1806  | 180                 | 180          |             | Submission of Information Disclosure Stmt                      |             |
| Fee Fee Fee Fee  | e Description  |   |                     |              |             | Recording each patent assignment per                           |             |
| Code (\$)  | ns in excess of 20                                     | 8021  | 40                  | 802          |             | property (times number of properties)                          |             |
| 1202 10 2202 0   | endent claims in excess of 3                           | 1809  | 770                 | 280          | 9 385       | Filing a submission after final rejection (37 CFR 1.129(a))    |             |
| 1203 290 2203 145 Multip   | ole dependent claim, if not paid                       | 1810  | 770                 | 281          | 0 385       | For each additional invention to be examined (37 CFR 1.129(b)) |             |
|  | issue independent claims<br>er original patent         | 1801  | 770                 | 2801         | 385         |  |             |
| 1205 18 2205 9 ** Re   | issue claims in excess of 20<br>I over original patent | 1802  | 900                 | 1802         | 900         | Request for expedited examination of a design application      |             |
| (a) 656 00   |  |   | Other fee (specify) |              |             |  |             |
| **or number previously paid, if greater; For Reissues, see above   |  | *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) |                     |              |             |  |             |
| of Harmon provided party in greatery and the state of the |  |   |                     |              |             | (Complete (if applicable))                                     |             |

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34,503